

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1 - 11 (Canceled).

Claim 12 (Currently Amended): A gas for plasma ~~reaction, comprising~~ reaction comprised of octafluorocyclopentene, ~~characterized in that the gas for plasma reaction wherein said~~ octafluorocyclopentene has ~~an octafluorocyclopentene~~ a purity of at least 99.9% by volume based ~~on the total volume of the gas for plasma reaction;~~ and the total content of nitrogen gas and oxygen gas, contained as trace gaseous ingredients of the remainder, is not larger than ~~[[200]]~~ 150 ppm by volume.

Claim 13 (Currently Amended): The gas for plasma reaction according to any one of claims 12 or 27 ~~claim 12, characterized as having~~ wherein said gas has a moisture content of not larger than 20 ppm by weight.

Claim 14 (Currently Amended): The gas for plasma reaction according to any one of claims 12 or 27 ~~claim 12, characterized by being~~ wherein said gas is used for dry etching, chemical vapor deposition or ashing.

Claim 15 (Withdrawn): A process for producing a gas for plasma reaction claimed in claim 1, characterized by distilling a crude reaction product predominantly comprised of octafluorocyclopentene in an inert gas of group 0.

Claim 16 (Withdrawn): The process for producing a gas for plasma reaction according to claim 4, wherein the inert gas of group 0 is at least one inert gas selected from helium gas, neon gas and argon gas.

Claim 17 (Withdrawn): A process for producing a gas for plasma reaction claimed in claim 1, characterized by comprising a first step of distilling a crude reaction product predominantly comprised of octafluorocyclopentene into a purity of at least 99.9% by volume, and a second step of removing trace amounts of impurities of the remainder.

Claim 18 (Withdrawn): The process for producing a gas for plasma reaction according to claim 6, characterized in that, in the second step, a distilled product obtained in the first step is refluxed with heating in an inert gas of 0 group.

Claim 19 (Withdrawn): The process for producing a gas for plasma reaction according to claim 7, characterized in that, in the second step, the product refluxed with heating is further placed in contact with a molecular sieve or an adsorbent.

Claim 20 (Withdrawn): The process for producing a gas for plasma reaction according to claim 7, wherein the inert gas of group 0 is at least one inert gas selected from helium gas, neon gas and argon gas.

Claim 21 (Withdrawn): The process for producing a gas for plasma reaction according to claim 6, characterized in that, in the second step, a distilled product obtained in the first step is subjected to simple distillation in an inert gas of 0 group.

Claim 22 (Withdrawn): The process for producing a gas for plasma reaction according to claim 10, characterized in that, in the second step, the product subjected to simple distillation is further placed in contact with a molecular sieve or an adsorbent.

Claim 23 (Withdrawn): The process for producing a gas for plasma reaction according to claims 10, wherein the inert gas of group 0 is at least one inert gas selected from helium gas, neon gas and argon gas.

Claim 24 (Withdrawn): The process for producing a gas for plasma reaction according to claim 6, characterized in that, in the second step, a distilled product obtained in the first step is subjected to degassing under a reduced pressure at a low temperature.

Claim 25 (Withdrawn): The process for producing a gas for plasma reaction according to claim 13, characterized in that, in the second step, the product subjected to degassing is further placed in contact with a molecular sieve or an adsorbent.

Claim 26 (Withdrawn): A process for producing a semiconductor device, characterized by comprising at least one step selected from a dry etching step, a chemical vapor deposition step and an ashing step; in each of said steps, a gas for plasma reaction claimed in claim 1 being used.

Claim 27 (New): A gas for plasma reaction, consisting of: octafluorocyclopentene having a purity of at least 99.9% by volume; and no more than .1% trace gaseous impurities, wherein a total

content of nitrogen gas and oxygen gas contained in said trace gaseous impurities, is not larger than 150 ppm by volume.

Claim 28 (New): The gas for plasma reaction according to claim 12, wherein the octafluorocyclopentene has a purity of at least 99.95 % by volume.

Claim 29 (New): The gas for plasma reaction according to claim 12, wherein the octafluorocyclopentene has a purity of at least 99.98 % by volume.

Claim 30 (New): The gas for plasma reaction according to claim 12, wherein the total content of nitrogen gas and oxygen gas is not larger than 100 ppm by volume.